

# HAND DELIVERED

FEB 2 9 2008

UTAH DIVISION OF SOLID & HAZARDOUS WASTE

February 29, 2008

Dennis R. Downs, Director Utah Division of Solid and Hazardous Waste 288 North 1460 West Salt Lake City, Utah 84114-4880 Attention: Rob Powers

Re: 2007 Solid Waste Incinerator Annual Reports, Davis Energy Recovery Facility

Dear Mr. Downs:

Please find the following documents transmitted with this letter to satisfy the annual reporting requirements of the Utah Administration Code R315-302-2(4) for the Davis Energy Recovery Facility which is owned and operated by Wasatch Integrated Waste Management District.

- Calendar year 2007 Solid Waste Incinerator Annual Report (state form)
- Report of training programs and procedures completed by facility personnel during 2007
- Report of residue characterization during 2007
- Financial Assurance documentation required by UACR315-309

Please do not hesitate to contact me if you have any questions regarding these submissions.

Sincerely,

Wasatch Integrated Waste Management District

Nathan Rich, P.E.

**Executive Director** 

attachments

Mail to: Dennis R. Downs, Director Division of Solid and Hazardous Waste P.O. Box 144880 Salt Lake City, Utah 84114-4880

www.hazardouswaste.utah.gov

# SOLID WASTE INCINERATOR ANNUAL REPORT

For Calendar year 2007 or most recent fiscal year

Administra	tive Information (Plea	ase enter all the information requested b	pelow - type or print le	gibly)	
Facil	ity Name: Davis Was	te-To-Energy Facility			
Facil	ity Mailing Address:_	P. O. Box 900			
		(Number & Street, Box and/or Route)			
		Zip C			
	County: <u>Davis</u>				
Own	<u>er</u>				
	Name: Wasatch Integ	rated Waste Management District Ph	one No.:(801) 61	4-5600	
		(Number & Street, Box and/or Route)			
	City: Layton	State: UT Zip (	Code: 84041 <b>-</b> 090	0	
	Contact's Name: Na	athan Rich Title: Ex	ecutive Director		
	Contact's Mailing A	Address: P.O. Box 900			
	Phone No.:(801) 61	Address: <u>P.O. Box 900</u> 14-5601 Contact's Email Add	lress: <u>nathanr@</u> w	iwmd.org	
Oper	cator (Complete this section on	ly if the operator is not an employee of the Owr	age above above		
<u>Oper</u>	Momo:	y if the operator is not an employee of the Owr	ier snown above)		
	Maille.	Phone No.:(			
	Mailing Address:	(Number & Street Poy and/or Pouts)			
	City	State: Zin (	Code:		
	Contact's Name:	State: Zip (			
	Contact's Mailing	Addrage			
	Phone No :( )	Address:Contact's Email Add	dress:		
		Contact's Email Add			
Facility Typ	oe and Status				
	ge Incinerator  ity greater than ten tons per day	Small Incinerator  Capacity less than ten tons per day but greater than 250 pounds per week			
<del></del> ,	Currently in Operation		date that all waste and ash we		the site)
Waste Incin					
•				•,	
Total	I tons received at facil	ity for incineration: 123,240			
Waste Type	٦	Waste Origin	Total	Measure	
	In-State	Out-of-State			Cubic
Municipal	119,256	0	119,256	_ 🛛 🥇	Yards
Industrial	3,981	0		_ 🖂	
111440111111			- 1		_

<sup>1</sup>C/D waste includes all waste going to a Class IV or VI landfill

Ash Disposal				
Tons of as	n disposed:	35,264		
Facility at	which ash wa	s disposed: Davis	Landfill	
Recycling	-			
or	shoul	ald not be included in the tons of the defendance of the department of the defendance of the defendanc	.)	waste diverted to compost. Compost
Fee Paid to the U	tah Departm	ent of environment	al Quality	
Disposal F	ee Required t	o be paid to State	Yes 🛛 No 🗌	
Fee Paid	Municipal Industrial	<u>\$</u> \$	C/D Annual	\$ \$ 14,700
Financial Assura	nce			
Current Current (ie. Financi (ie. Current  Financial As changes each trust accoun Note Fac	Post-Closure Financial Ass Bond, Trust Fund, Co al Assurance Name of Bond Comp Amount or B surance: Each for year. The inflates should include illities using "Low vide the information."	ition factor can be found a copy of the most recen	Trust Fund/Gover  t.)  Utah State Treasur  trigive account number)  m: \$4,449,613.15  the cost of closure to account the Division web part account statement.  al Test" or the "Corporation"	count for inflation and design age. Facilities that are using a ate Financial Test" must
year.  Signature:  Signature should be by an	executive office, ger	feral partner, proprietor, electe	D	Date: 2-29-08 d representative. A duly authorized
representative must meet the Print name:	ne requirements of the	e solid waste rules (UAC R31.	5-310-2(4)(d)). Title:_ <b>EXECUT</b>	ive Director

# Wasatch Integrated Waste Management District 2007 Plant Training Report

Wasatch Integrated Waste Management District Plant personnel completed the following training during 2007.

#### **NEW HIRE TRAINING**

Each new plant employee completed the following training before being assigned to any task at the plant including:

- MTU Computerized Safety / Hazard Communication Program
- New Hire Orientation: safety equipment requirements, emergency gathering points, plant specific hazards, hazardous materials program
- Safety Manual

Each employee also received task specific training before being assigned to any new task at the plant.

## PERIODIC SAFETY MEETINGS

Periodic meetings were held either on a daily basis or periodically between scheduled monthly safety meetings for the purpose of discussing pertinent and timely safety issues at the plant. Upon completion of training, a signature from all employees was required regarding understanding presented material.

#### **MONTHLY SAFETY MEETINGS**

Monthly safety meetings were held to discuss, in detail, OSHA applicable, heavy equipment operation, site specific issues, and Solid Waste Association of North America (SWANA) applicable training/industry standards. All employees attended and participated in practical application exercises, and exhibited understanding regarding information presented.

#### **ADDITIONAL TRAINING**

January Respirator Annual Training (OSHA); 40 hour HAZWOPER

Certification; New Hire Orientation; 1<sup>st</sup> Aid/CPR/AED Re-certification;

February Confine Space Annual Training (OSHA) – "Size-fit" 14" x 1.5,' 24" x

24," 3.5' x 4.5' openings – used SKED rescue pt mover through opening w/ pt aboard; 8 hr HAZWOPER Re-certification; 1<sup>st</sup>

Aid/CPR/AED Re-certification

March Lockout/Tagout (OSHA) When Things Go Wrong – man down

scenario; Facility Elementary School Tours; HAZMAT DRILL (Semi-

truck fuel spill); HAZMAT DRILL - Decontamination

April Forklift (Classroom, Fuel System, Driving Practical Exam) (OSHA);

Forklift (Practical); Facility Elementary School Tours

May Overhead Crane Safety

June Scaffolding, Lifts, Air Monitoring Basic Safety – included how to assist

donning a SCBA - Pre-2007 Plant Shut Down; Power Wash Annual

Re-certification; Contractor Safety Orientation

July Contractor Safety Orientation; Plant Shut Down

August 1<sup>st</sup> Aid/CPR/AED Re-certification

September Blood/Air Borne Pathogen (OSHA); New Hire Orientation; Sliding

**Boom Lift Basic Safety Orientation** 

October Scissor Lift Basic Safety Orientation; Fire Systems: Fire Extinguisher

Operation (OHSA)

November HAZCOM Annual Refresher (OSHA) – Operations of Air

Monitor/MSDS for Hydrochloric Acid and Quick Lime; New Hire

Orientation

December: Hearing Protection (OSHA); SWANA based Waste Screening

Training; 8 hr HAZWOPER Re-certification

Certification requirements for managers included credit hours continuously earned by attending previously cited classes, in addition to other applicable conferences, and seminars.



November 2, 2007

Mr. Dennis Downs, Director Utah Division of Solid and Hazardous Waste 288 North 1460 West Salt Lake City, Utah 84114-4880 Attention: Rob Powers, Environmental Scientist

Re: Financial Assurance as of June 30, 2007 for the Davis Landfill and Energy Recovery Facility.

#### Dear Mr. Downs:

This letter is provided to update the financial assurance sufficient to assure adequate closure and post-closure care of the Davis Class I Landfill and Energy Recovery Facility operated by Wasatch Integrated Waste Management District (The District) as of June 30, 2007. Closure and post-closure costs as of June 30, 2007 have been updated with current costs estimates.

As required under Utah Administrative Code (UAC) R315-309 the District estimates total closure and post-closure costs for the entire Davis Landfill and Energy Recovery Facility as follows:

<b>Closure and Post Closure Costs</b>	June 30, 2006	Jun	e 30, 2007		
Landfill					
Unlined Cell Closure Costs		Closed		Closed	
Stage A Closure Costs		\$2,755,274		Closed	
Stage B Closure Costs		\$2,264,109	•	\$3,635,738	
Stage C Closure Costs		<u>\$3,212,822</u>	<u> </u>	\$4,550.447	
Landfill Closure Costs		\$8,232,205		\$8,186,185	
Landfill Post-Closure Costs		<u>\$2,358,813</u>		\$2,122,5 <u>60</u>	
Total Landfill Closure and Post-C	losure Costs	\$10,591,018	\$	10,308,745	
Energy Recovery Facility Total Energy Recovery Facility C Total Closure and Post-Closure C		\$82,025 \$10,673,043	<u>\$84,486</u>		
(Landfill & Facility)	OSIS	<u>\$10,075,045</u>	<u> </u>	10,393,231	
Landfill Capacity (Cubic Yards)	<u>Total</u>	<u>Used</u>	<u>%Used</u> ]	Remaining	
Unlined Cell Capacity Lined Cells Capacity Total Landfill Capacity	2,463,782 5,217,850 7,681,632	2,463,782 1,452,824 3,916,606	100% 28% 51%	0 3,765,026 3,765,026	

#### **Energy Recovery Facility Estimated Life**

	Costs	Accumu <u>Depreci</u>		Percent <u>Used</u>
Energy Recovery Facility (Building, Boilers, Emission Eq.)	\$45,647,220	\$34,272	2,141	75%
Closure and Post-Closure Liability				
	June 30, 2007 Total Costs	% Used		e 30, 2007 l Liability
Landfill Closure	\$8,186,185	28%	9	52,292,132

# **Financial Assurance General Requirements**

Total Closure & Post-Closure

Landfill Post-Closure

For the financial assurance (UAC) R315-309-2(3) (a) states:

Total Landfill Closure & Post-Closure

**Energy Recovery Facility Closure** 

The closure cost estimate shall be based on the most expensive cost to close the largest area of the disposal facility ever requiring a final cover at any one time during the active life in accordance with the closure plan...

\$2,122,560

\$84,486

\$10,308,745

\$10,393,231

51%

75%

\$1,082,506

\$3,374,638

\$3,438,003

\$63,365

The District in accordance with (UAC) R315-309-2(3) estimates closure cost for the Energy Recovery Facility and the Davis Landfill's <u>largest area ever requiring a final cover at any one time during the active life in accordance to the closure plan to be:</u>

Largest Area Closure Costs:	June 30, 2007
Landfill Largest Area Closure Costs	
Stage A Closure Costs	Closed
Stage B Closure Costs	\$3,635,738
Stage C Closure Costs	\$4,550,447
Post-Closure Costs	\$2,122,560
Landfill Subtotal	\$10,308,745
Energy Recovery Facility Closure Costs	\$84,486
Total Largest Area Closure and Post-Closure Current Costs	\$10,393,231

The District estimates are provided in current dollars and based on the costs for a third party contractor(s) to perform the work in accordance with the final closure plan.

#### Financial Assurance Mechanisms

The District, in accordance with (UAC) R315-309-3(4), intends to provide financial assurance for the period ending June 30, 2007 by a combination of mechanisms that together meet the \$10,393,231 requirements of subsection (UAC) R315-309-1(1). The financial assurance mechanisms chosen by the District are:

#### (UAC) R315-309-4 Trust Fund

The District has established an escrow account with the Utah State Treasurer invested in the Utah Public Treasurers" Investment Fund which has been accepted by the Utah Division of Solid and Hazardous Waste meeting the requirements of (UAC) R315-309-4. The balance as of June 30, 2007 is \$4,332,906.

### (UAC) R315-309-8 Local Government Financial Test

The District intends to provide the remaining required balance of \$6,060,325 for closure and post-closure financial assurance through the Local Government Financial Test.

## The Local Government Test requires:

## • (UAC) R315-309-8(2)(a)

The District had no bonds outstanding as of June 30, 2007.

## • (UAC) R315-309-8(2)(c)

The District's financial statements are prepared in conformity with Generally Accepted Accounting Principles for governments. Crane, Christensen & Ambrose an independent certified public accounting firm has audited the June 30, 2007 Financial Statements.

#### • (UAC) R315-309-8(2)(d)

The District has placed a reference to the closure and post-closure costs in each audited financial report since 1994. The District current fiscal year comprehensive annual financial report as of June 30, 2007 also contains a reference to closure and post-closure care costs. All subsequent comprehensive annual financial reports during the time in which closure and post-closure care costs are assured through the financial test will include a reference to the closure and post-closure care costs assured through the financial test. The reference to the closure and post closure care cost include:

- (i) the nature and source of the closure and post-closure care requirements
- (ii) the reported liability at the balance sheet date
- (iii) the estimated total closure and post-closure care costs remaining to be recognized
- (iv) the percentage of landfill capacity used to date
- (v) the estimated landfill life in years

#### • (UAC) R315-309-8(6)(a)

"If the local government does not assure other environmental obligations through a financial test it may assure closure, post-closure, and corrective action costs that equal up to 43% of the local government's total annual revenue."

The cost of closure and post-closure care of the Davis Landfill and Energy Recovery Facility are the only current costs that the District is assuring by the Local Government Financial Test. In accordance with (UAC) R315-309-2(3) the District estimates the current cost to be covered by the Local Government Financial Test is \$6,060,325.

As required by (UAC) R315-309-8(4)(a)(i)(ii) I certify that Wasatch Integrated Waste Management District currently exceeds the requirements of Subsections (UAC) R315-309-8(2) and (6) for closure and post-closure care costs of the Davis Landfill. Evidence for this statement is calculated as of fiscal year ended June 30, 2007:

Total revenue:	\$16,496,339
Less gain (Loss) on sale of assets: FY 2007:	(367,170)
Total annual revenue for fiscal year 2007:	\$16,129,169
43% of the local government's total annual revenue:	43%
Maximum allowable assurance by financial test:	\$6,935,543

Based on this calculation the District meets the requirements and can provide the \$6,060,325 through the Local Government Financial Test.

# • (UAC)R315-309-8(4)(b)

Wasatch Integrated Waste Management's audited financial statements audited by Crane Christensen & Ambrose for the fiscal year ending June 30, 2007 are attached to this letter.

# • (UAC)R315-309-8(4)(c)

A report to the District's Administrative Control Board from a independent certified public accountant stating the procedures performed and the findings relative to the requirements of Subsections UACR315-309-8(2)(c) and UACR315-309-8(3)(c) and (d) is attached to this letter.

#### • (UAC)R315-309-8(2)(d)

The District will include a reference to the closure and post-closure care costs assured through the financial test into the next comprehensive annual financial report and in every subsequent comprehensive annual report during the time in which closure and post-closure costs are assured through the financial test.

If you have any questions or require any additional information please feel free to contact us at 801-614-5600.

Sincerely,

Wasatch Integrated Waste Management District

Nathan Rich, P.E.

**Executive Director** 

David Van De Graff

Controller

Cc: Steve Crane

# WASATCH INTEGRATED WASTE MANAGEMENT DISTRICT

Report on Application of Agreed-Upon Procedures

November 7, 2007



Steven F. Crane, CPA Kent R. Christensen, CPA Jeffrey L. Ambrose, CPA Chuck Palmer, CPA

Independent Accountant's Report On Application of Agreed-Upon Procedures

President and Board of Directors Wasatch Integrated Waste Management District P.O. Box 900 Layton, UT 84041-0900

We have performed the procedures enumerated below which were agreed to by you solely to assist the District in meeting its closure and post-closure care financial assurance requirements. This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the specified users of the report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

#### PROCEDURES:

- 1. Compare the data and statements contained in the letter dated November 2, 2007 from the District's controller David VanDeGraff with the data and statements presented in the audited financial statements for the year ended June 30, 2007 to determine that the data and statements in the letter were taken directly, or were appropriately derived, from the financial statements.
- 2. Confirm that the financial statements were prepared in conformity with Generally Accepted Accounting Principles for Governments.
- 3. Confirm that the District did not operate at a deficit equal to 5% or more of its total annual revenue for the past two years.
- 4. Confirm that the financial statements were audited by the independent certified public accountant.
- 5. Confirm that the District's audited financial statements did not receive an adverse opinion, disclaimer of opinion, or other qualified opinion from the auditor.

#### FINDINGS:

- 1. We confirmed that the data and statements contained in the letter dated November 2, 2007 from the District's controller were taken directly or were appropriately derived from the audited financial statements for the year ended June 30, 2007.
- 2. We confirmed that the financial statements were prepared in conformity with Generally Accepted Accounting Principles for Governments.
- 3. We confirmed that the District did not operate at a deficit equal to 5% or more of its total annual revenue for the past two years.
- 4. We confirmed that the financial statements were audited by the independent certified public accountant.
- 5. We confirmed that the District's audited financial statements did not receive an adverse opinion, disclaimer of opinion, or other qualified opinion from the auditor.

We were not engaged to and did not perform an audit, the objective of which would be the expression of an opinion on the specified elements, accounts or items. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that could have been reported to you.

This report is intended solely for the use of the specified users listed above and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purposes.

Crane Christensen & ambrasa

	Landfill								Distric	Wide					
	Larvini								Waste		Percentage				
	Yearly	MSW	MS	w T	Yearty	Ash	Ash		Yearly MSW & Ash		MSW & Ash Processed		Waste	Increase	
Year	Placement		Cumul		Placen		Cumula		MSW &		Cumula	tive	at Plant	Disposed	in Tonnage
	(ton/yr)	(cy/yr)	(ton)	(cy)	(ton/yr)	(cy/yr)	(ton)	(cy)	(ton/yr)	(cy/yr)	(ton)	(cy)	(ton/yr)	(ton/yr)	
1953	885	1,476	885	1,476	1	***	0	0	885	1,476					
1954	1,771	2,951	2,656	4,427			0	0	1,771	2,951	1		1		
1955	2,656	4,427	5,312	8,854		1	0	0	2,656	4,427		'			
1956	3,542	5,903	8,854	14,757	1	1	0	0	3,542	5,903	1				
1957	4,427	7,378	13,281	22,135	- 1	ı	0	0	4,427	7,378	l l				
1958	5,312	8,854	18,594	30,989	i	- 1	0	0	5,312	8,854	- 1		ł		
1959	6,198	10,330	24,791	41,319	1		0	0	6,198	10,330	İ		ł		
1960	7,083	11,805	31,875	53,125	1	j	0	0	7,083	11,805	1		1	l .	
1961	7,969	13,281	39,843	66,406	1		0	0	7,969	13,281	Į.		}	ł	
1962	8,854	14,757	48,698	81,163		:	0	0	8,854	14,757	1			1	
1963	9,740	16,233	58,437	97,395	ļ	j	0	0	9,740	16,233	i i		ļ		·
1964	10,625	17,708	69,062	115,103	1	- 1	0	0	10,625	17,708	l l		1	1	
1965	11,510	19,184	80,572	134,287		j	0	0	11,510	19,184	]		1	ļ	}
1966	12,396	20,660	92,968	154,947	1		0	0	12,396	20,660	1		1	1	1
1967	13,281	22,135	106,249	177,082			0	0	13,281	22,135	ı		l	1	1
1968	14,167	23,611	120,416	200,693			0	0	14,167	23,611	1		1	i	1
1969	15,052	25,087	135,468	225,780	1	1	0	0	15,052	25,087	1		l	1	ł
1970	15,937	26,562	151,405	252,342			0	0	15,937	26,562		,	1	1	ı
1971	16,823	28,038	168,228	280,380	l		0	0.	16,823	28,038	ì			1	
1972	17,708	29,514	185,936	309,894			0	0	17,708	29,514			i i	1	<b>!</b>
1973	18,594	30,989	204,530	340,883	ľ		0	0	18,594	30,989			1	ł	1
1974	19,479	32,465	224,009	373,348	i 1		0	0	19,479	32,465				1	1
1975	20,364	33,941	244,373	407,289			0	0	20,364	33,941	1			i i	1
1976	21,250	35,416	265,623	442,705			0	0	21,250	35,416 36,892	1		Į.	ļ	1
1977	22,135	36,892	287,758	479,597	1		0	0.	22,135 23,021	38,368	1		i	1	ł
1978	23,021	38,368	310,779	517,965	!!		ŏ	0	23,906	39,843			1	1	1
1979	23,906	39,843	334,685	557,808	1 1		l ŏ	ŏ	24,791	41,319	1 1		ı	1	1
1980 1981	24,791	41,319 42,795	359,476 385,153	599,127 641,922	1 1		ŏ	ŏ	25,677	42,795	1		1	1	1
1982	25,677	44,271	411,716	686,193	1 1		Ĭŏ	ŏ	26,562	44,271	i i		1	1	ļ
1983	26,562 27,448	45,746	439,163	731,939			ŏ	ŏ	27,448	45,746	1 1		1	1	1
1984	28,333	47,222	467,496	779,161	i i		ŏ	ŏ	28,333	47,222	1 1		1	1	1
1985	29,219	48,698	496,715	827,858			Ö	ŏ	29,219	48,698	1		1	1	1
1986	30,104	50,173	526,819	878,032			Ìò	ŏ	30,104	50,173	] {		1	1	1
1987	30,989	51,649	557,808	929,681	1,742	1,161	1,742	1,161	32,731	52,810	559,550	930,842	6,698	ł	1
1988	31,875	53,125	589,683	982,805	27,147	18,098	28,889	19,259	59,022	71,223	618,572	1,002,064	103,616		1
1989	32,760	54,600	622,443	1,037,405	30,609	20,406	59,498	39,665	63,369	75,006	681,941	1,077,071	111,549	1	i
1990	33,646	56,076	656,089	1,093,481	30,214	20,143	89,712	59,808	63,860	76,219	745,801	1,153,289	109,623		1
1991	34,531	57,552	690,620	1,151,033	29,674	19,783	119,386	79,591	64,205	77,334	810,006	1,230,624	109,022		1
1992		59,027	726,036	1,210,060	31,683	21,122	151,069	100,713	67,099	80,149	877,105	1,310,773	104,82		1
1993		60,503	762,338	1,270,563	24,077	16,051	175,146	116,764	60,379	76,554	937,484	1,387,327	101,61		. 1
1994		80,708	810,763	1,351,272	32,483	21,655	207,629	138,419	80,908	102,364	1,018,392	1,601,651	125,46		
1995		121,268	883,524	1,472,540	33,938	22,625	241,567	161,045	106,699	143,894	1,125,091	1,704,014			
1996		112,683	951,134	1,585,223	31,398	20,932	272,965	181,977	99,008	133,615	1,224,099	1,847,908			
1997	97,247	138,924	1,048,381	1,724,148	32,969	21,979	305,934	203,956	130,216	160,904	1,354,315	1,928,104			
1998		165,331	1,164,113	1,889,479	34,653	23,102	340,587	227,058	150,385	188,433	1,504,700	2,116,537			
1,999		194,867	1,300,520	2,084,346	34,615	23,077	375,202	250,135	171,022	217,944	1,675,722	2,334,481			
2,000		174,824	1,422,897	2,259,170	34,944	23,296	410,146	273,431	157,321	198,120	1,833,043	2,532,601			
2,001		212,856	1,571,896	2,472,026	30,458	20,305	440,604	293,736	179,457	233,161	2,012,500	2,765,762			
2,002		176,821	1,695,671	2,648,848	32,439	21,626	473,043	315,362	156,214	198,447	2,168,714	2,964,210			
2,003		171,596	1,815,788	2,820,443		22,116	506,217	337,478	153,291	193,712		3,157,92			
2,004		178,937	1,941,044			24,225	542,554	361,703	161,593	203,162		3,361,08			
2,005		192,941	2,076,103			22,272	575,962	383,975		215,213		3,576,29			
2,000		196,747	2,213,826			24,983	613,437	408,958		221,730	2,827,262	3,798,02			
June (		106,083			18,746	12,497	632,182	421,455	93,004	118,580	2,920,266	3,916,60	6 63,99	3 138,25	1 -48

Total Landfill:

7,681,632 = Permitted Design Capacity of Landfill

3,916,606 = Waste in Landfill at June 30, 2007

3,765,026 = Volume Remaining Total Site 51% = Percentage of Total Landfill Used

Unlined Cell:

2,463,782 = Permitted Design Capacity of Untined Cell (Closed) 0 = Volume Remaining

100% = Percentage of Unlined Landfill Used

Lined Cell:

5,217,850 = Permitted Design Capacity of Lined Cell

1,452,824 = Waste in Lined Cell at June 30, 2006

3,765,026 = Volume Remaining in Lined Cell at June 30, 2006 28% = Percentage of Lined Cell Used at June 30, 2006

#### Notes:

## Design Landfill Capacity = 7,681,632 cubic yards of waste per 2002 permit

Areial survey data indicates that as of June 1996 the landfill had received 1,781,100 cubic yards of waste. To estimate the total received through December 1996, 1,847,908 cubic yards, it was assumed that half the waste received during 1996 was received after the June survey.

The amount of waste received during 1994 and later is documented by scale house records.

Waste placement rates for the years prior to scale records was estimated by distrubiting the remaining volume, 1,270,563 cy, over the years 1953 through 1993 assuming an annual increase of 885 tons per year.

1200 lb/cy in place density 1952 through 1996

1400 lb/cy in place density thereafter

# LANDFILL POST-CLOSURE COSTS (30 YEARS)

Section	1.0	D -	Knoine	ering

	1 1.0 - Eugineering					
ltem.	Describition	UnitMeas	ire Cosytunia a	io Units	Total Cost	
1.1	Post-Closure Plan	NA NA			\$0	
-	Annual Report (including results from gas, leachate.	1				·
	and ground water sampling - details of maintenance performed)	LS	\$5,000	30	\$150,000	
	Semiannual Site Inspections	LS	\$320	60	\$19,200	(1 day of time)
ь	Plan Update	LS	\$200	30	\$6,000	
			Engineer	ing Subtotal	\$175,200	1

Section 2.0 - Gas Collection System - Sampling

_	Decide in	200 - Cas Concente Dystem - Daniphing						1
1	liene?	Description	Unit	Measure	Costline	No this	Total Cost	
			7					
1	2.1	Sample Collection	LS		\$320	120	\$38,400	QUARTERLY SAMPLING (Documentation)
1	2.2	Sample Analysis	NA				\$0	(4 hours of time)
1	2.3	Report (Fart of Anneal Report)						
ı				Gas Colle	ection System - S	mpling Subtotal	\$38,400	1

Section 3.0 - Leachate Collection System - Sampling

	t item	Description.			Mozlinis		
l		Sample Collection	LS	\$80			SEMI-ANNUAL SAMPLING (Documentation) (2 field hours, minimal analysical work)
ŀ		Sample Analysis Report (rart of Annual Report)	NA	\$400	60	\$24,000	(2 Bell nours, manning manyacan work)
t			Leachate Coll	ection System - S	ampling Subtotal	\$28,800	e e e

Section 4.0 - Ground Water Monitoring System - Sampling

Dection	1 3-0 - OLUMBU WATER MANHIOLIN					
SUITE		E Unit Melane	Continue	o Units	Total Cost	
	Branch Branch Control of the Control		1			
31	Sample Collection	18	\$640	60	\$38,400	QUARTERLY SAMPLING (2 days/event)
	Sample Analysis	10	\$6,000	120	\$720,000	
					- 4.20,000	
3.3	Report (Fact of Annual Report)		<del></del>		\$7.00 A00	
1	I	Ground Water Col	lection System - Sampli	ng Subtotal	\$758,400	

Section 5.0 - Kacility Operations and Maintenance

Hent	De original	Eline Méssica	CostUpa	No. Poils	Total Cost	
4.1	Cover		<del>  -</del>			· 
	Soil Replacement	LS	\$1,000	30	\$30,000	
6		LS	\$500	30	\$15,000	
4.2	Storm Water Protection Structures					
	Ditch and Culvert Maintenance	LS	\$500	30	\$15,000	
ь	Berm and Basin Maintenance	LS	\$500	30	\$15,000	
43	Gas Collection System					
	System Operation	NA	\$240	3120		(4 hours @ \$60/hr every we
ь		LS	\$2,000	30	\$60,000	
4.4	Leachate Collection System					
3	System Operation	NA		30	\$0	1
ь	System Repair	NA		30	\$0	
4.5	Ground Water Monitoring System					
	System Operation	NA	· .	30		4
b	System Repair	LS	\$500	30	\$15,000	1
4.6	Site Security					. ·
	Lighting, signs, etc	LS	\$500	30		
	Fencing and Gates	LS	\$500	30	\$15,000	2
4.7	Miscellaneous					1
			<u> </u>			4
1	b		11			4
		Facility Operations and Maintenance Subtotal			\$928,800	3

Total \$1,929,600
10% Contingency \$192,960
Total Post-Closure Cost \$2,122,560